

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A seismic source system comprising:
 - a buoy comprising:
 - an operating system;
 - a seismic wave production device operated by the operating system;
 - a placement system;
 - a wireless buoy communications system; and
 - a dynamic position locating system generating a position signal indicating the location of the buoy; and
 - a wireless remote control system in wireless remote communication with the buoy through the wireless buoy communications system.
2. (original) The seismic source system of claim 1 where the buoy further comprises the seismic wave production device position being controlled by a winch engaged with an arm extending from the buoy.
3. (original) The seismic source of claim 1 where the buoy further comprises more than one seismic wave production device, each seismic wave production device position being controlled by a winch engaged with an arm extending from the buoy.
4. (original) The seismic source device of claim 1 where the seismic wave production device comprises an air gun.
5. (currently amended) The seismic source device of claim 1 where the operating system further comprises an air storage vessel charged by a compressor controlled by a controller, the seismic wave production device comprising an air gun powered by the air storage vessel.

6. (currently amended) The seismic source device of claim 1 where the placement system further comprises ~~a~~an anchor winch attached to an anchor by an anchor line, the anchor winch being controlled by the wireless remote control system.

7. (currently amended) The seismic source device of claim 6 where the placement system further comprises ~~a second more than one~~ anchor winch attached to ~~a second an~~ anchor by ~~a second an~~ anchor line, the ~~second anchor winch winches~~ being controlled by the wireless remote control system.

8. (currently amended) The seismic source device of claim 1 where the wireless buoy communications system further comprises a wireless buoy telemetry system in wireless remote communication with the wireless remote control system.

9. (currently amended) The seismic source device of claim 1 where the wireless remote control system further comprises a wireless remote control telemetry system in wireless communication with the wireless buoy communications system.

10. (original) The seismic source device of claim 1 where the dynamic position locating system further comprises a GPS system.

11. (original) The seismic source device of claim 1 where the buoy further comprises an operating sensor.

12. (original) The seismic source device of claim 1 where the operating sensor comprises a hydrophone.

13. (withdrawn)

14. (withdrawn)

15. (withdrawn)

16. (withdrawn)
17. (withdrawn)
18. (withdrawn)
19. (currently amended) A seismic acquisition system comprising:
 - a buoy comprising:
 - an operating system;
 - a seismic wave production device operated by the operating system;
 - a placement system;
 - a wireless buoy communications system;
 - a dynamic position locating system generating a position signal indicating the location of the buoy; and
 - a wireless remote control system ~~suitable for communicating in wireless communication~~ with the buoy through the wireless buoy communications system; and
 - a seismic receiver located in a wellbore.
20. (currently amended) The seismic acquisition system of claim 19 where the seismic receiver is located on a drill string.
21. (currently amended) The seismic acquisition system of claim 19 where the seismic receiver is located on a wireline tool.
22. (currently amended) The seismic acquisition system of claim 19 where the seismic receiver is located on a well casing.
23. (currently amended) The seismic acquisition system of claim 19 where the seismic receiver is located on a work string.

24. (currently amended) The seismic acquisition system of claim 19 where the seismic receiver is located in the annulus between a well casing and the borehole wall.
25. (currently amended) The seismic acquisition system of claim 19 where the seismic receiver is in communication with a data signal processor through a receiver telemetry system.
26. (currently amended) The seismic ~~source~~-acquisition system of claim 19 where the buoy further comprises the seismic wave production device position being controlled by a winch engaged with an arm extending from the buoy.
27. (currently amended) The seismic ~~source~~-acquisition system of claim 19 where the buoy further comprises more than one seismic wave production device, each seismic wave production device position being controlled by a winch engaged with an arm extending from the buoy.
28. (currently amended) The seismic ~~source-device~~-acquisition system of claim 19 where the seismic wave production device comprises an air gun.
29. (currently amended) The seismic ~~source-device~~-acquisition system of claim 19 where the operating system further comprises an air storage vessel charged by a compressor controlled by a controller, the seismic wave production device comprising an air gun powered by the air storage vessel.
30. (currently amended) The seismic ~~source-device~~-acquisition system of claim 19 where the placement system further comprises a an anchor winch attached to an anchor by an anchor line, the anchor winch being controlled by the wireless remote control system.
31. (currently amended) The seismic ~~source-device~~-acquisition system of claim 30 where the placement system further comprises a ~~a second more than one~~ anchor winch attached to a ~~a second~~ an anchor by a ~~a second~~ an anchor line, the ~~second~~ anchor winch being controlled by the remote control system.

32. (currently amended) The seismic ~~source-device-acquisition system~~ of claim 19 where the wireless buoy communications system further comprises a wireless buoy telemetry system in wireless remote communication with the wireless remote control system.

33. (currently amended) The seismic ~~source-device-acquisition system~~ of claim 19 where the wireless remote control system further comprises a wireless remote control telemetry system in wireless communication with the wireless buoy communications system.

34. (currently amended) The seismic ~~source-device-acquisition system~~ of claim 19 where the dynamic position locating system further comprises a GPS system.

35. (currently amended) The seismic ~~source-device-acquisition system~~ of claim 19 where the buoy further comprises an operating sensor.

36. (currently amended) The seismic ~~source-device-acquisition system~~ of claim 19 where the operating sensor comprises a hydrophone.

37. (withdrawn)

38. (withdrawn)

39. (withdrawn)

40. (withdrawn)

41. (withdrawn)

42. (withdrawn)

43. (withdrawn)

44. (withdrawn)

45. (withdrawn)

46. (withdrawn)

47. (withdrawn)

48. (withdrawn)

49. (withdrawn)

50. (withdrawn)

51. (withdrawn)

52. (currently amended) A system for generating a seismic wave comprising:

a means for wirelessly remotely controlling a placement system on a buoy to position the buoy, the means for wirelessly remotely controlling the placement system ~~communicating~~ being in wireless remote communication with the buoy through a wireless buoy communications system;

a means for controlling an operating system on the buoy; and

a means for producing a seismic wave with a seismic wave production device on the buoy.

53. (currently amended) A system for acquiring seismic data on an underground formation comprising:

a means for wirelessly remotely controlling a placement system on a buoy to position the buoy;

a means for controlling an operating system on the buoy;

a means for producing a seismic wave with a seismic wave production device on the buoy;

a means for wirelessly transmitting a monitoring signal from the buoy to the means for wirelessly remotely controlling a placement system, the monitoring signal comprising the signature of the seismic wave as a function of time;

a means for wirelessly transmitting a position signal from a dynamic position device on the buoy to the means for wirelessly remotely controlling a placement system, the position signal indicating the position of the buoy at the time of generating the seismic wave;

a means for receiving the seismic wave; and

a means for generating a data signal indicative of the received seismic wave.